Catalogue of American Amphibians and Reptiles.

ERNST, CARL H. 1972. *Clemmys guttata.*

Clemmys guttata (Schneider)
Spotted turtle

Testudo guttata Schneider, 1792:264. Type-locality, unknown; designated as Philadelphia, Pennsylvania by Mittleman (1945:171). Type not known to exist.

Testudo punctata Schoepff, 1792:25. Type-locality, "Philadelphiam," [Pennsylvania]. Type not known to exist.

Testudo anonyma Schneider (*Nomen nudum*) Schoepff, 1792: 25.

Emys guttata: Schweigger, 1812:295.

Emys punctata: Merrem, 1820:24.

Cyclemys punctata: Wagler, 1830:137.

Terrapene punctata: Bonaparte, 1831:159.

Clemmys punctata: Fitzinger, 1835:124.

Geoclemys guttata: Gray, 1855:19.

Nanemys guttata: Agassiz, 1857:442.

Clemmys guttata: Strauch, 1862:107.

Geoclemmys sebae Gray, 1869:188. Type-locality, not stated; designated as vicinity of Philadelphia by Schmidt (1953: 91). Type presumably in the British Museum (Natural History).

Chelopus guttatus: Cope, 1875:53.

Melanemys guttatus: Shufeldt, 1919:155.

• CONTENT. *Clemmys guttata* is a monotypic species.

• DEFINITION. Adults are 80–125 mm in carapace length. The carapace is smooth, unkeeled, and unserrated posteriorly. It is black in ground color and bears a various number of small, yellow, circular spots. The plastron is unhinged and ivory in ground color with black blotches. The alveolar surface of the upper jaw is narrow, lacks a ridge, and has its inner edge parallel to the cutting edge. The skin is gray to black in color. The limbs may contain yellow spots. The head has a broken yellow band near the tympanum, and occasionally another extending posteriad from the orbit. Males have brown eyes and a brown chin; females have orange eyes and a yellow chin. Males have longer tails with the anal opening nearer the tip. The male plastron is concave, whereas it is flat or convex in the female.

• DESCRIPTIONS. General descriptions are given by Babcock (1919, 1938), Carr (1952), Conant (1951, 1958), McCauley (1945), Pope (1939), Smith (1961), and Wright (1918). More detailed descriptions are given as follows: skull, McDowell (1964); nasal embryology and morphology, Parsons (1960, 1968); cervical vertebrae, Williams (1950); carapacial seam contacts, Tinkle (1962); respiratory musculature, Shah (1962); penial morphology, Zug (1966); and color pattern, Yerkes (1905).

• ILLUSTRATIONS. Color photographs of adults are present in Babcock (1919), Schmidt and Inger (1957), Conant (1958), and Pritchard (1967); and other photographs of adults are found in Cahn (1937), Pope (1939), McCauley (1945), Carr (1952), Conant (1951), Smith (1961), and Pritchard (1967). Juveniles are represented by a color photograph in Conant (1958), and by other illustrations in Agassiz (1857), Cahn (1937), Pope (1939), Conant (1951), and Nemuras (1967). The eggs are illustrated in Agassiz (1857) and Pope (1939). McDowell (1964) included drawings of several aspects of the skull and Zug (1966) a drawing of the glans penis.

• DISTRIBUTION. *Clemmys guttata* is restricted to eastern North America where it ranges from southern Ontario and Maine southward along the Atlantic Coastal Plain to southern Georgia and westward through Ontario, New York, Pennsylvania, central Ohio, northern Indiana and southern Michigan to northeastern Illinois. There are questionable records from northern Florida, and Dickinson (1965) has published Wisconsin records of *C. guttata* which could not be verified.

• FOSSIL RECORD. No fossils of *Clemmys guttata* have been recorded, but Adler (1968) reported archeological records from Sauk County, Wisconsin, Calhoun and Marshall counties, Illinois, and Saginaw County, Michigan.

• PERTINENT LITERATURE. General accounts of the biology of *Clemmys guttata* are given by Evermann and Clark (1916), Babcock (1919, 1938), Grant (1936), Cahn (1937), Pope (1939), McCauley (1945), Conant (1951), Carr (1952), and Nemuras (1966, 1968). Other important references are listed below by topics. Taxonomy: McDowell (1964). Reproduction: Babbitt (1932), Finneran (1948), Mehrtens (1949), Adler (1961), and Ernst (1967, 1970b). Hatchlings: Nemuras (1967). Food and feeding: Surface (1908) and Lagler (1943). Temperature relationships: Hutchison, *et al.* (1966), and Ernst (1967). Hibernation: Netting (1936). Evaporative water-loss relationships: Ernst (1968b). Dispersal and migration: Netting (1936), Schmidt (1938). Homing ability: Ernst (1968a). Home range: Ernst (1970a). Growth: Grant (1935), Graham (1970). Neck growths: DeSola (1928). Parasitic relationships: Hughes, *et al.* (1941), Rausch (1947), Crans (1968), and Crans and Rockel (1968). Algal relationships: Moski (1957a, 1957b). Erythrocytes: Hutchison and Szarki (1965). Color patterns and sexual dimorphism: Yerkes (1905), Blake (1922), and Grant (1935).

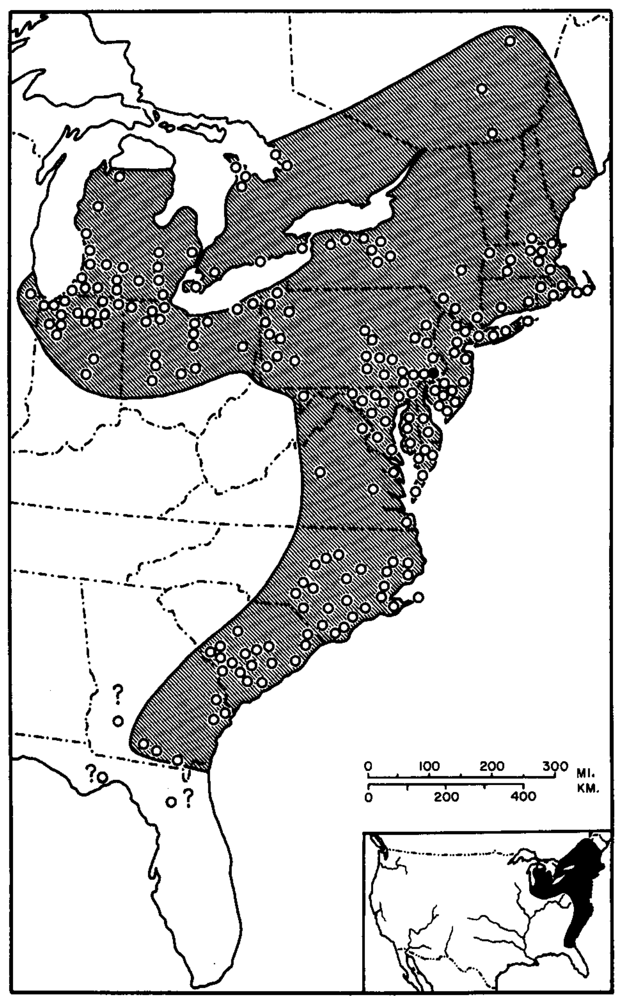
• ETYMOLOGY. The specific name *guttata* is derived from the Latin *guttatus*, "spotted" or "speckled" and refers to the yellow spots on the carapace.

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MAP. The solid circle marks the type-locality; open circles indicate other selected localities.

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